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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,672	10/23/2001	Stephen Williams	00-507	2450

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LSI LOGIC CORPORATION
1621 BARBER LANE
MS: D-106 LEGAL
MILPITAS, CA 95035

EXAMINER	
PSITOS, ARISTOTELIS M	

ART UNIT	PAPER NUMBER
2653	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/002,672	WILLIAMS ET AL.	
	Examiner	Art Unit	
	Aristotelis M Psitos	2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 8/19/04 + 5/17/04

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☑ Claim(s) 1-15, 20-28 is/are pending in the application.

4a) Of the above claim(s) 9 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-8, 10-15, 20-28 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Applicants' response of 8/19/2004 and 5/17/2004 have been considered with the following results.

Claim 9 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement with respect to claim 9 in the reply filed on 8/19/2004.

Applicant's election with traverse of Group I invention (note above) in the reply filed on 8/19/2004 is acknowledged. The traversal is on the ground(s) that the alleged groups;

a) are not drawn to separate groups,

b) there is no serious burden of search presented to the examiner;

c) they are not separate/distinct because the examiner has not presented objective evidence or appropriate explanation the conclusory statement, other than that they are distinct" since claim 9 was previously examined and considered allowable.

This is not found persuasive because previously presented dependent claim was interpreted as drawn/limited to a medium (record) having a set of instructions (contained thereon, written) so as to synchronize a phase lock loop with an intermittent clock signal wherein as disclosed and latter claimed this intermittent clock signal is from an optical disc interspersed with header signals.

This interpretation leads the examiner to indicate that in such an environment, the limitations of claim 9 were/are allowable.

Present claim 9 is not so limited, i.e., the intermittent clock signal can be from any clock source (such as an internal clock signal) not requiring any consideration of data/sectors and header regions as found on an optical disc.

Hence present claim 9 is drawn to subject matter normally found in class 713, subclass 500 which expands the original search area, and further supports the position that such is a serious burden to the examiner as well as indicative of the distinctness there between. If applicants' can convince the examiner that these claims are indeed drawn to the same scope, then the above restriction requirement will not be maintained/pursued.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1 Claims 1- 8,10-15,20-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As originally filed and disclosed, the system operated in a free-running state of the oscillator during a "spin-up" operation. Subsequent to such appropriate phase locking occurred and upon further detection of the header region (the second periods) operation is as further stated on page 22 lines 3-5.

Hence there is no ability as originally filed to permit free-running operation/state upon the detection of the ***plurality of second periods.*** Rather as disclosed, once the pll is locked, the pll is maintained during the header regions i.e., the second periods when the intermittent clock signal is absent.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2 Claims 1-4 and 10 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Eom and either Katoh, or Shim.

As noted/disclosed in Eom, a pll for detecting the loss of wobble signal is appropriately detected.

The examiner interprets the "intermittent clock" signal of claim 1 as the wobble signal, and that during initiation of the system (asynchronous mode) is the starting mode. Hence, as operation is initiated, the first step of claim 1 is met, "seeking to acquire phase lock" and that when the wobble signal is absent not present during the window period of Eom, the phase lock loop is held (since phase lock has yet to occur) is a free-running (open loop) state.

With respect to claim 2, the initial start up state is interpreted as the "asynchronous mode".

Alternatively if applicants can convince the examiner that the start up condition is not the asynchronous mode, then the examiner would rely upon applicants' description of such/ as indication of such a well-known initial period. It would have been obvious to modify the base system of Eom with an initial start up mode, since all systems start from an initial/asynchronous mode.

With respect to claim 3, the "geometric eccentricity" is interpreted as the wobble signal.

With respect to claim 4, the examiner interprets the operation of figure 4 as establishing the ability to time the clock signal (wobble) as well as having the system in an unlock state during an elapsed time of such – see col 4 line 44 plus. Although there is no "header" clearly depicted, the existence of "header" signals in this environment is considered to be inherently present in the Eom system – dvd-r. Alternatively if applicants' can convince the examiner that such "header" does not exist then the examiner would rely upon the teaching from either Shim, or Katoh, which teach in this environment dvd-r the existence of "header".

It would have been obvious to modify the base system of Eom with the additional teaching from either Shim or Katoh, motivation is to use existing dvd signal format and save valuable resources is not having to create a new dvd-r format, i.e., use existing formats and hence also increase the flexibility to Eom so as to be used in existing system.

With respect to the single means of claim 10, it is met by the Eom system.

Response to Arguments

Applicant's arguments filed 5/17/04 have been fully considered but they are not persuasive. With respect to the reliance upon applicants' priority date, since priority has not been perfected, the position predicated upon Eom is maintained.

3. Claims 1- 3,10 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Jeon.

Applicants' attention is drawn to the discussion of figures 3-4 of Jeon, see for instance the discussion starting at col. 5 line 14 till col. 6 line 12. As noted therein, during the intermittent clock signal presence – during wobble, the pll is being seeked. There is a timing of the duration of the header periods, the second periods, and as noted therein, this is when there is no intermittent clock signal. The examiner

interprets that the limitation of step c is present, because a time period (timing a duration of the first periods) is present be the timing circuitry of Jeon, that it he detects a timing of the header signals, and as known these header signals are at the end of the data sectors – see figure 4.

With respect to claim 2, the asynchronous mode is interpreted to mean during a start up condition, which is considered inherently present in the Jeon system, i.e., it needs to start at some time.

With respect to claim 3, the intermittent clock signal is the wobble signal.

Claim 10 is met because the structure, i.e., the pll and control circuitry needs to be present in order to perform the steps of claim 1.

With respect to claim 12, the additional ability to force the pll into the acquisition state upon re-emergence of the clock signal is present in the Jeon system, i.e., relocking of the pll occurs when the clock signal re-emerges.

4 Claims 6,8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeon considered with Shim.

Jeon provides for the first two steps of claim 6. There is no description of any estimating a signal envelope for the intermittent clock.

The ability of doing such is taught by the Shim reference – see the disclosure with respect to the rf output through the wobble slicer elements 1103, 1109 as noted in figure 7 and the associated description.

It would have been obvious to modify the base system of Jeon with the above estimation ability taught by Shim, motivation is to provide for a better detected wobble signal (intermittent clock).

With respect to claims 8 and 15 such an element is noted as part of the circuitry of Shim (lpf of the rf signal).

Conclusion

No art rejection is made on claims 5, 7, 11,13, 14, 20-28. If applicants' can overcome the above 112 rejection as stated above in paragraph 1, independent claim 13 would be allowable as any of its dependent claims. Dependent claims 5 and 20, 7, 21-23 define over the art of record, however, in addition to the above 112 rejection, their respective parent claims have been rejected as stated above.

THIS ACTION IS MADE FINAL.

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos
Primary Examiner
Art Unit 2653

AMP